

# Startup as Type of Enterprise Within the Debate on the Capitalism in Poland

Magdalena Andrejczuk\*

Tomasz Jałukowicz\*\*

## Abstract

*In recent years we have seen many signs of growing interest of ,startups' all over the world and in Poland as well as a growing number of new businesses, named ,startup', which is business ventures, operating in the broad IT/digital economy sector. The goal of the article is to improve understanding of the operations of startups, in the conditions of polish capitalism. The specific objectives are review of theoretical approaches and their adaptability to the startup analysis and comparison with the data about main characteristics new type of entrepreneurs in Poland – startup owner's.*

**Keywords:** startup; varieties of capitalism; innovation; entrepreneurship

## 1. Introduction – Startup as Challenge for Sustainable Public Policy Performance

The active role played by the public and private sector in promoting innovation in economic policy as well as dynamic growth of the startup market have boosted

---

\* Department of Economic Sociology; Collegium of Socio-Economics, Warsaw School of Economics; Magdalena.Andrejczuk@doktorant.sgh.waw.pl;

\*\* Department of Economic Sociology; Collegium of Socio-Economics, Warsaw School of Economics; Tomasz.Jalukowicz@doktorant.sgh.waw.pl

interest in this form of activity, as it combines traditional business operations, R&D-based exploration and the promotion of ideas and values typically found among less formalised activities of the non-governmental sector.

The startups boom in Poland, coupled with the government's proactive policy to finance new endeavours, means that interest in startups has skyrocketed, giving rise to an interesting research topic: this phenomenon implicitly realises the triple helix model at the interface of science, business and the public sector/administration.

For the academia, the analysis of startups is a challenge, since it calls for a multidisciplinary approach, combining political economy, economic sociology, public policy or ethnography. Moreover, it means that existing methods and conceptual approaches should be adapted to the special nature of the outlined field of research and the selected sample. Therefore, analytical studies in the aforementioned field are fragmented and incoherent, largely relying on the observation of startups in liberal market economies.

Hereby, we have made an attempt to embed the Polish startup discourse in a broader perspective of narratives around the varieties of capitalism paradigm. The article aims to improve understanding of the startups ecosystem within the specific research field for further analysis of this phenomenon in Poland. Thus, the attention will be paid to the theories that could provide explanatory variables and their possible impact on conditions and processes of startups development with relation to the innovation performance.

We have made juxtaposition of two hypotheses that should straighten out the discourse:

- **H1:** In dependent market economies, startups help to bring people to the labour market, acquire new skills or boost entrepreneurial spirit among graduates (as part of an active labour market policy), rather than make an important contribution to the policy that fosters breakthrough innovations serving the economy.
- **H2:** The startup boom results from the crisis of capitalism, precarisation of labour and the strategy of defence against insecurities and risks on the domestic and global market. This influences the selection of industries where startups want to operate (digitalisation, application development): in those industries profits are measurable and short-term-based, as opposed to industries focused on long-term investments (social challenges, creation of new markets of tangible goods or services).

## 2. The so-Called Polish Capitalism – Review of Theoretical Approaches and their Adaptability to the Startup Analysis

Poland is, in particular, interesting example of transition from post-communist, endogenous state-led economy state towards exogenous state-led economy in terms of growing dependency from foreign direct investments (FDI) and EU's structural funds. Therefore, three main approaches will be taken into consideration: dependence theory and world-system theory, economic geography and uneven development as well as varieties of capitalism and its critics. The impact of FDI penetration and the position in global value chains based on comparative advantages and exploitation by developed countries were broadly analyzed by the authors representing dependence theories, likewise economic geography as well as world-system analysis and centre-periphery interdependence.

Thus, Samir Amin argues that the rapid external investments from centre to peripheries drives inequivalent trade, comparative specialization (disintegration) and economic dominance of centre. The growth and economic performance is tamed and the transition to the peripheral capitalism as underdeveloped country is occurred (Amin 1987: 120–124).

Andre Gunder-Frank (1969) proposes a distinction between underdeveloped and undeveloped country. He argues that underdevelopment is a derivate of the process contradictory to the development towards advanced modes of production and capitalism. The role of FDI in short terms might be positive with regard to the GDP growth, however, in a long term the impact is rather negative.

Raul Prebisch gives another assumption that inequivalent exchange of goods and accumulation of capital is a result of exploitation of peripheries. Within his theory of peripheral capitalism, he draws three main features: structural heterogeneity; specialization of peripheries as well as uneven development. Prebisch argues that, utilizing of Ricardo's theory of comparative advantages, provides limitation of development of industry and trade.

Therefore, centre-periphery interdependence with dominating role of centre capitalist economies and its impact on semi-peripheral countries should be considered more broadly. In particular in the situation of liberalization of trade and international markets within economic integration as well as developing globalization with

hegemonic position of Silicon Valley as a provider of one -size-fits-all business model for startups in the global value chains. Also EU context provides additional factors for further investigation. Krugman and Venables (1995) suggests that close but imperfect integration may create regional winners and losers as well as that global economic integration leads to uneven development. In the earlier work, Krugman (1991), seeks the explanation for self-establishing centre-periphery opposition within the country following the endogenous development path. He recognizes such opposition between agriculture and industry. Nonetheless, in our opinion, this pattern is applicable to the opposition between hi-tech and traditional industries.

Furthermore, N. Lee and A. Rodriguez-Pose (2013: 1–22) provides the first comparative evidence on the link between innovation and inequality linking impact of innovation on wage settlements and labour market with socio-economic and institutional context. Both, focusing on the role of labour mobility, education, human density and labour market institution as factors of deepening inequality within the innovation performance.

Additional critical arguments are provided by Erik S. Reinert (2013) who argues that the EU innovation policy fosters primitivization of the EU periphery by closing down heavy intensive industry instead of developing those light-weight and services with keeping R+D intensive labour and innovation outside the region.

Nonetheless, the centre-periphery interdependence and economic geography provide the analytical context, that could be even disputable with regard to the Polish and CEE countries which have been catching up the capitalist centre since the collapse of communism. The major attempts have been made to find the right place between two dominating models of modern/late capitalism as it proposed by Hall and Soskice (2001): coordinated market economy (CME) and liberal market economy (LME). Notwithstanding, the concept is either acclaimed or criticized, it gives a useful starting point for analyzing the role of socio-economic context for startups development in CEE. The gap that is drawn, thanks to Hall and Soskice dichotomy, provides the new field for more deepened analysis the Polish startups and capitalism. Hall & Soskice bind CME with the incremental innovation and multidimensional matrix of interactions and discourses among firms and industrial actors. As the LME is linked to the radical innovation characterized by competition and formal contracting.

Akkermans criticize this by giving another hypothesis that points out the role of either specialization in radical innovation or the government's intervention in the state economy. Hence, the typical CMEs economies such as Germany and Sweden

may provide evidences in favor of radical innovation in machinery and transport equipment manufacturing (Akkermans 2009: 181–191).

Taylor argues VoC hypothesis is strongly depended on the dominant country in each of model, respectively USA for LME and Germany for CME. Taylor investigates an impact of innovation defined through patenting performance and following citations as well as the role of government. Therefore, USA specializes its patenting in industries typified by radical innovation, while Germany's patent specialization is in industries typified by incremental innovation. Apart from, US and Germany-specific features for VoC's applicability, the results may vary, i.e. Australia and New Zealand, according to Taylor's analysis, are closer to CME than LME model. Finally Taylor shows relatively that LME strengths are in chemistry, physics, biomedical research and math, while CMEs are also strong in chemistry as well as engineering, physics and biology (Taylor 2004: 601–631).

Varieties of Capitalism and its discontents both drive us towards more comprehensive approach with regard to the CEE. A. Nölke, A. Vliegthart (2009) proposal of 'dependent market economies' seems to be feasible here. 'DMEs have comparative advantages in the assembly and production of relatively complex and durable consumer goods. These comparative advantages are based on institutional complementarities between skilled, but cheap, labour; the transfer of technological innovations within transnational enterprises; and the provision of capital via foreign direct investment (FDI)'. One characteristic of DME countries (Poland, Czech Republic, Slovakia and Hungary) is their essential dependence on investments by transnational companies. 'The common denominator of the third variety is the fundamental dependence of the CEE economies on investment decisions by transnational corporations' (Nölke, Vliegthart 2009: 672). A. Nölke, A. Vliegthart leave more ambivalent thesis that although massive FDI has undoubtedly made a positive impact on CEE industries, while its broader societal implications may be more ambivalent (Nölke, Vliegthart 2009). Bluhm provides collected typology of VoC-related variations, including types/variations by sorted by authors, including Poland as continental type of market capitalism (D. Lane); liberal market-coordination (M. Knell & M. Srholec); continental (L. Cernat) (Bluhm 2010: 201). Additionally, D. Lane refers to Wallerstein's world-system theory linking with CEE as semi-peripheries, although contradicting the typology proposed by him (Bluhm 2010: 205). Nevertheless, we foresee usefulness of world-system theory for CEE purposes.

When describing Polish capitalism, we can go beyond the concept of DME and also apply a term coined by U. Becker – 'liberal dependent post-communist capitalism' (Becker 2009). Moreover, we can draw on the term proposed by J. Hausner

– ‘department-corporatist networks’ (układy resortowo-korporacyjne) (Hausner 2011: 85), and the ‘embedded neoliberal type’, typically for Visegrad states notion, taken from a typology proposed by D. Bohle and B. Greskovits (2012). However, it is a good idea to look at the symptomatic attributes of Poland’s economy, which can accelerate but also considerably constrain the growth of entrepreneurship, especially in connection with innovation-based startups.

The most comprehensive typology of the Polish model of capitalism has been developed by J. Gardawski, that argues ‘Polish political economy is an example of an embedded liberalism, with the growing liberalisation of the economy, in the job market and in public services. This process is favoured by state policies and occurs with a meagre participation of non-corporate institutions and in the context of individualist culture’ (Gardawski 2013: 26).

### 3. Startup as Phenomenon in the Global Terms

Giddens distinguished such concepts as marketization of society and market socialization – businesses become embedded into the society through embracing forms of social activity. ‘Marketization, because capitalist production and distribution constitute the core of modern institutions’. These phenomena are accompanied by the technological revolution, introduction of innovative product and service solutions, expansion of the IT sector, corporatism, information capitalism, network enterprise, and the key attributes are flexibility and innovation, adaptability and coordination (Giddens 2010: 17).

Works by Castells, Sedlacek (2011), Kramer and Porter (2006: 79-92), Klein (2009), Piketty (2015), Tapscott and Williams (2011), indicate that world economies and capitalism itself are undergoing transformation caused by the growth of new technologies, communication styles and economic models (sharing, collaborative economy). Simultaneously, new models and movements are emerging such as co-opting, crowdsourcing, peer-to-peer, prosumer movement as well as social innovation, open innovation and user-driven innovation. Other popular concepts are so called Big Ideas such as Prahalad’s Bottom of Pyramid (BoP), Porter and Krammer’s Shared Value, etc.

Changes in global economies (Hardt, Negri 2005), growth of uncertainty (Beck 2002), the emergence of precariat (Standing 2014), global activism and antimodernism (Hardt, Negri 2009), liquid modernity (Bauman 2007), end of capitalism (Wallerstein

2004), end of capitalist work (Rifkin 2009) or the rapid growth of immaterial work (Lazzarato 2010) and transition to cognitive capitalism draw a relevant context here as well (Moulier-Boutang 2012).

In these conditions, the postmodern man adapts its economic activity to minimise risks. Startups offer entrepreneurs a chance to survive, and under certain conditions also reach a global success. Startups, launched mostly by graduates, people up to 35 years of age, adapt a model that diverges from the traditional rules of doing business. Their focus on idea development, lack of formalism, and the pre-determined ephemerality of the project are their core characteristics and an adaptation strategy to operate in the economy of precariousness and insecurity.

First and foremost, they are high-risk ventures, do not require high investment to start operations but often need external funding to finance their growth. It is a perfectly competitive market, with zero or close to zero cost of entry. The market bid is developed on the basis of an original idea, often a virtual product and is easily scalable and can dominate the market, build value which benefit their owners or shareholders. A specific transition happens along the lines of Bourdieu's commodification of capitals – the final stage of a startup's development cycle always closes in the transformation of cultural, social and symbolic capital into economic capital (Bourdieu 1986).

We are convinced that it is necessary to analyse the social capital dimensions in order to describe the startupper's group. It is believed that the role of social capital is a key component of an entrepreneurs' know-how at the startup stage. Social capital does not only make it possible to conceptualize an idea for business. It is first and foremost a determinant of success and profitability (Paunescu, Badea 2014: 560–568). Hence, the strengths of strong ties in the creation of innovation even if operate in the weak networks, have an impact in contrary to Coleman's view (Rost 2011: 588–604).

The perspective of semi-peripheral economies in which entities follow global models, it is interesting to note that startups outside the centre find it difficult to go beyond their local market and attract partners or investors, especially while commercialisation depends on a host of non-economic factors (abilities and their dynamics; impact of competitive advantages or creating business alliances), which is illustrated by the example of New Zealand (Paradkar et al. 2015: 1–10). A similar analysis based on a holistic approach to innovation and networking grounded in social capital to increase correlation between innovation and international reach was adopted for Poland (Lewandowska et al. 2016).

In a number of countries institutional support for startups and innovative ventures is a country's attempt to bypass or transform its industrial economy. Large companies have the potential to generate demand for innovation while the supply side, represented by startups, universities and research institutes, could drive the country's innovativeness, limited by available investment capital. Our hypothesis, stating that it is the labour market and entrepreneurship policy rather than innovation that form the main pillar of economic policies, it comes from the observation of labour market changes from regular employment to individualised work arrangements, self-employment or other flexible forms of employment. Those are typical to the economies that have gone through a rapid transition to the market economy model, predominantly following the prescriptions of the Washington Consensus.

Roman, Congregado and Millan introduce the assumption that in the specific condition of semi-peripheral economies, startups incentive drive the combating unemployment as part of active labour market policy instead of being innovation/industry based policy (Roman et al. 2013: 151–175).

To some extent we assume that this transition from manufacturing/material labour in the industrial capitalism model to individualism or collective individualism in a network structure of startups generates a new employment dimension on the job market based on immaterial labour, termed entrepreneurial economy, that will also influence the emerging post-capitalist global economic system (Thurik et al. 2013: 302–310). Also useful for further analyses will be the premise of an existing correlation between high social capital and internationalization potential (attracting investment capital) (Presutti 2007: 23–46).

We should also explore growth trajectories of startups against the dimension of shareholder versus stakeholder orientation. The shareholder versus stakeholder capitalism model (Tittenbrun 2012: 374) is crucial particularly in relation to attracting capital, a key factor in startups' growth. Such analysis will also allow for referencing the concept of stakeholder developed by Freeman (1984). Another interesting approach, related to the role of enterprises in contemporary economy, is to review the attitudes and experiences of startupperes against Kramer and Porter concept of 'creating shared value' (Kramer 2006), as well as the model of 'Enterprise – Idea' by J. Hausner and Zmysłony (Hausner, Zmysłony 2015).



## 4. Startups – Definition and Characteristics

While startup is a term with multiple, non-systemised meanings, there are some common features such as: relative newness, high risk involved in startups' operations or operating in new technologies and related industries and one constitutive feature is searching for an optimal business model.

A broader definition was adopted in *Raport o sytuacji mikro i małych firm w roku 2015 (Report on Micro and Small Enterprises in 2015)*. In the document, startups are defined as new businesses, starting their operations, entrepreneurs who often have excellent, innovative ideas for business that allow them to effectively compete on the market for a period longer than three years. The authors estimate that each month there are 20–25 thousand such new businesses launched in Poland (Pekao SA 2016). However, according to the literature on the subject and the terms adopted by the startup community, the definition of a startup should be narrower. 'The concept of startup is identified as a new venture operating in the IT and related industries. By definition, a startup should be created for the purpose of conducting business, not necessarily to generate profit shortly after launch. To qualify as a startup, a business does not need to be based on an entirely new or innovative idea' (Pekao SA 2016: 4).

Meanwhile, research into the startup ecosystem in Poland conducted by Deloitte, assumes that startups represents such industries as: IT solutions and solutions supporting digital transformation, multimedia and telecommunications technologies, technologies optimising the consumption of energy and renewable energy sources, biotechnology and medical technologies, nanotechnology and material and industrial technologies (Deloitte 2016: 4). 'Startup was described as an undertaking aiming at delivering new products and services in the conditions of high uncertainty, with a history no longer than 10 years. The specifics of such ventures and the experience of the most innovative economies indicate that an efficiently functioning environment is necessary for the growth of such business' (Deloitte 2016: 4).

Among the definitions of a startup, we should quote those by Blank (2013): 'A startup is a temporary organization designed to search for a repeatable and scalable business model', Graham (2012) 'A startup is a company designed to grow fast. Being newly founded does not in itself make a company a startup. Nor is it necessary for a startup to work on technology, or take venture funding, or have some sort of 'exit'. The only essential thing is growth. Everything else we associate with startups follows from growth'.

We shall assume a definition proposed in the first national representative survey of Polish startups *Polskie Startupy. Raport 2015* (Polish Startups. Report 2015) can be taken for optimal if startups are considered in the context of the ITC industry. 'A Polish startup is a business venture registered in Poland or whose one or more partners is a Polish citizen, and whose operations (also) cover the Polish market (for example: produces computer software) A local branch of a business organization with headquarters in a different country does not qualify as a Polish startup. ... Startups usually describe themselves as software developers who distribute their products in SaaS model and are the most likely to operate in the market of: mobile applications, e-commerce, and internet services' (Startup Poland 2015).

Startups are usually placed reductively in the sector of digital economy, often specialize in information processing and related technologies that comprise their key business model (digital native). There some typical elements of startup organizational culture: high business risk, inducing quick decision making as well as a specific approach to failure (a lesson, error or stimulation for growth), goal orientation towards reaching success, which causes startupper make repeated attempts to reach their goal. Other important elements are relationships, investors' commitment, high mobility and openness, availability of products and services (international, often in multiple local languages). Through building relations with their clients and consumers, startups are also able to continue introducing changes to fine-tune their projects. Another characteristic of the startup model is that prototypes are often quickly brought to the market. Successful projects are developed further while a failure does not rule out consecutive attempts with new projects (Sowiński 2012). These 'genetic' characteristics (or rather Bourdieu's habitus) of the agents creating startups have been analysed from the perspective of their scientific / academic or purely business origins (Colombo et al. 2012: 79–92).

Links with large business are often founded in corporate venture capital (CVC), corporate funds earmarked for investment in startups. The startup-corporation cooperation is however based on an antagonism. 'Startups are modeled to be fast and flexible, create and "burn" new business models or technological innovations. Their nature is iterative, from one sprint to another. Unlike corporations with their slowly enveloping processes, often grounded in long-term strategies, startups usually adopt the Agile project methodology originating from computer technologies, more and more often embracing the Lean Startup approach that requires a business to change focus frequently and quickly' (PKN Orlen 2016: 22). Authors of the report *Gra o innowacje* (Innovation Game) propose 'To bring the two worlds together, we need a greenhouse – an independent unit, separated from the rest of the organization,

focused on the growth processes and following its own set of rules. With the involvement of specialists provided by the organization and the use of their network of contacts, the environment will allow for scaling up a mature innovative concept while maintaining stability inside the enterprise' (PKN Orlen 2016: 22).

Academic environment is a natural habitat for the development of startups, due to the presence of incubators, accelerators and, first and foremost, access to research. According to the guidelines developed by Harvard University, to succeed a startup requires the following: 'obtain trusted advice and mentorship, talk to customers, bring on the right team members, be passionate, prepare a one -minute elevator pitch that will grab someone's attention and motivate him or her to ask for more information, practice the company pitch, network with other entrepreneurs and representatives in the industry' (Startup Guide 2011).

## 5. Startups in Poland

### – Overview of Literature on the Subject

Three reports mapping the startup landscape in Poland were published in the last year, all already quoted in the definitions section: *Polskie Startupy. Raport 2015*, report from the study delivered by Startup Poland Foundation (Startup Poland 2015); *Diagnoza ekosystemu startupów w Polsce* (Diagnosis of Startup Ecosystem in Poland) executed by Deloitte in cooperation with the National Centre for Research and Development in Poland, T-Mobile and PKO Bank Polski (Deloitte 2016); and *Raport o sytuacji mikro i małych firm, które rozpoczynają działalność* (Report on Micro and Small Enterprises Entering the Market) practically describing the entire sector with businesses representing all industries (Pekao SA 2016).

Among the publications on the subject in Polish literature are analyses of the financial aspect of startup development, ones focusing on financing by business angels (Piekutko-Matniak 2014), reviews of growth potential (Gemzik-Salwach et al. 2014: 108–119), sources of financing (Smus 2014: 217–231), private equity funds in Poland (Sołoma 2010: 196–201), or the impact of the global crisis on the operations of startups (Gemzik-Sawlach 2014: 99–109), as well as an attempt to review the impact of startups as an instrument for stimulating the job market (Dychała 2015). The role of public administration in fostering innovation in the SME sector in Poland was discussed by Klonowski (2009). There has been no systematic research into the

subject, although similar analyses have been conducted by academic centres in other countries (Davila et al. 2010: 79–105).

The overview of literature on the subject would be incomplete without collective publications presenting startups in the form of interviews with the founders of subjectively selected ‘best Polish startups’ (Kotliński 2015), or enterprises located in specific geographic regions (Lipski et al. 2015). Polish Agency for Enterprise Development published three reports and analyses also covering the process of startup development (Sowiński et al. 2012), analyses of American startups (Sowiński 2012) as well as a set of ebooks with the analyses of the digital market and business (see: [http://www.web.gov.pl/wiedza/biblioteka/e-booki/590\\_1228\\_e-booki.html](http://www.web.gov.pl/wiedza/biblioteka/e-booki/590_1228_e-booki.html)).

The literature is complemented by the content published on websites and blogs such as: [mamstartup.pl](http://mamstartup.pl), [startuphub.pl](http://startuphub.pl), [startupgrind.pl](http://startupgrind.pl), [startupacademy.pl/blog](http://startupacademy.pl/blog), [startuppoland.org](http://startuppoland.org), [ostartupach.pl](http://ostartupach.pl), as well as in discussion groups and the social media.

## 6. Startups in Poland – Regional Specifics

According to the report quoted above, Poland has approximately 2400 startups of that fall under the above definition. The relevant database contains 460 organizations (<http://startuppoland.org/startup/>). In 2015 Startup Poland Foundation conducted the first survey in the startup community. The online questionnaire reached 423 entrepreneurs and the main idea behind *Startup Poland* survey was to fill the information gap, address the lack of such analyses in Poland. However, because of the character of the project, the study can only be approached as exploration. Another research project complimentary to the one delivered by Startup Poland Foundation is the 2016 survey conducted by Deloitte. The survey’s target was existing enterprises and enterprises planning to start operations on the Polish market and the questionnaire was filled by 211 startups, the founders represented 4/5 of the respondents (Deloitte 2016). The following summary of their characteristics is a compilation of the findings of the two surveys.

a. Startup Founders – Characteristics. A startup founder that emerges from the studies is a person with some experience in running a business (‘In 60% of cases among the founders include a person with experience in launching and running a startup. SaaS, mobile services, e-Commerce, Big Data and software development for business are areas far more likely to be chosen by the experienced than by

rookie startupper') (Startup Poland 2015: 10–11), aged 31–40, with higher education, operating in one of Poland's main three cities: Warszawa, Kraków, Poznań ('over a half of the respondents consisted of startups operating in any of the three cities: Warsaw, Kraków and Poznań. Other popular locations are Wrocław, Tri-City, followed by Łódź and Katowice') (Startup Poland 2015: 10–11).

Men dominate among startup founders (94% of all startups was founded only by men). Women were involved in the launch of one-third of the startups in the sample (in both studies the share is one-third) (Startup Poland 2015: 10–11; Deloitte 2016: 7).

Startupper ('In three-quarters of cases at least one of the founders had a MSc/MA degree. An engineering degree was held by at least one founder of 28% of the businesses and in 25% of the businesses there was a founder with a doctoral or professor degree') (Deloitte 2016: 79). To compare, in the *Startup Poland* study one in six startups was founded by entrepreneurs with professional experience in sciences (at least a doctoral degree) (Startup Poland 2015: 35). Meanwhile Deloitte's report indicates that 'nearly one in three concepts for a startup came from earlier research work. One in two Polish startups cooperates with academic partners' (Deloitte 2016: 83).

b. While exactly one-quarter of Polish startups partner with academics, (Startup Poland 2015:10–11) only 5% of them were founded in academic incubators (located on the academy's premises) and only one in ten startups used the services of an academic incubator or a technological park. 'Polish startups are also reluctant to use the help of experienced entrepreneurs. Only 12% declared to have participated in mentoring schemes. Roughly the same share indicated participation in industry events such as Aula, Hive, Startup Stage or OpenReaktor. Similarly moderate interest was declared for competitions, hackathons and Startup Weekends (7–12% declared participation, depending on the event type)' (Startup Poland 2015: 26).

c. Startup founders are perceived as entrepreneurs and innovators. There are 53 Polish startupper on the New Europe 100 Challengers list (a list of outstanding challengers from Central and Eastern Europe) (see: <http://ne100.org/challengers?filter-edition=2015&filter-country=Poland>).

d. Sources of financing. *Startup Poland* revealed that nearly 60% of Polish startups finances their operations solely from their own capital. Another source of financing is the European Union, through grants or seed fund. Nearly one-fifth of interviewed startups have used Polish or foreign venture capital funds and the same number was financed by business angels. Foreign sources of resources (capital or otherwise) are far less popular (or accessible) than domestic (Startup Poland 2015: 10–11).

The main sources of financing in the survey conducted by Deloitte are: the founders' capital (71.84%) and revenue from operations (44.25%). Venture capital

funds are used by one in four respondents, grants – by one in five. A business partner provided financing for 15.52% of the interviewed startups. Even less popular are business angels (11.49%), crediting, such as bank loans (9.20%) and crowdfunding (5.17%). The lowest share of indications (4.02%) was recorded for large companies investing in the solutions provided by startups in the form of share purchase or similar. Only 58% of Polish startups have attempted to attract external investors to finance for their venture.

*Startup Poland* also shows that Polish startups finance their growth mostly from their own capital. Over three-quarters plan to cover their investment in growth from their revenue, while over a half admitted counting on attracting investors, and one in three – a strategic partner. Merely one-quarter considers applying for EU funding (grant).

Interestingly enough, one in three startups is run by a single founder and often financed solely from EU grants and the founder's own capital. This is a definitely unique feature of the Polish market where access EU funding continues to be a major argument to start a business.

e. Industry and business model. In the study delivered by Deloitte the industries represented by startups were approached very broadly: over a half of the respondents represented businesses specializing in ICT solutions and support to digital transformation, a little under one-third – creative businesses and multimedia technologies. Other industries are: energy use optimisation and renewable energy sources technologies (12.57%), biotechnologies and medical technologies (9.14%), nanotechnologies and material technologies (6.86%), robotics and other industrial technologies (5.71%) and other segments (9.14%) (Deloitte 2016: 73).

In *Startup Poland* the respondents representing startups were the most likely to describe themselves as software developers who distribute their products in the SaaS model and operate in: mobile applications, e-commerce or internet services. The studies also indicate that Polish startups see business as their main target (B2B and B2B2C reached 78% in total, compared to 21% captured by B2C) (Startup Poland 2015: 14).

Despite their relatively youth owners, Polish startups have been active on the market for several years (in the Deloitte study over 80% of the interviewed startups were established over the last five years (Deloitte 2016: 73), and in the *Startup Poland* study two-thirds of the sample were startups with up to four years on the market, the rest are older and one in ten has been operating informally (had not been registered at the time of the interview) (Startup Poland 2015: 12).

In terms of founder structure, one in three startups is run by a single entrepreneur, while 60% – by two- or three-person teams. Importantly, startups are mainly micro businesses. In both studies ca. 80% of the startups employed maximum 10 people. Only one in six startups did not have any employees (Startup Poland 2015: 30). Most of the employees of the startups in the Deloitte study are aged 26–30 and are predominantly managers with a degree (Deloitte 2016: 80).

f. Goals and openness to cooperation with foreign organizations. The definitions quoted above show that a startup's main goal is find an optimal business model. 'The idea behind launching a startup is to prove that a business concept is executable to form a business venture at a relatively low cost. Other key goals are developing a business model able to generate profit and potential for success measured by business criteria. An innovative idea that represents the core of a startup is particularly important. Application of a new solution or upgrading an existing one is a foundation for a speedy market expansion and, consequently, obtaining quick return on the invested time and funds' (Sowiński 2012: 4).

However, the Deloitte study indicates that 'The main goal for the interviewed organizations was to reach the highest possible revenue in a relatively short time (over 45% [indications – M.A.]). In nearly one-third of the interviewed startups, capturing a maximum possible market share was the key priority, even at the cost of reduced revenue. Only 15% of the organizations focused on conducting R&D activities to later sell the business' (Deloitte 2016: 74).

An important aspect of a startup's operation is its scalability, its potential for expanding its operations to new markets. Among the *Startup Polska* respondents 54% are exporters (compared to 40% of the businesses that do not sell their products outside Poland). Export represents half of the exporters' total sales. The key export markets are: UK, USA (over 60% of indications) and Germany. Importantly, one in five startups has a branch abroad, a unit that manages their operations on a foreign market (Startup Poland 2015: 37). 20% of the enterprises in the Deloitte study have employees abroad, and in 8% of the startups all employees work from outside the country (Deloitte 2016: 80).

The following conclusions emerge for Poland from *The 2016 Startup Nation Scoreboard. How European Union Countries are Improving Policy Frameworks and Developing Powerful Ecosystems for Entrepreneurs*: 'Entrepreneurship has deep roots in Poland, and has helped the country achieve a level of independence and relative strength over the years. There is an ever increasing number of innovative companies which strengthen and develop the Polish startup ecosystem. Successes achieved in complex industries like biotechnology and programming demonstrate the unlimited

potential of Polish talent. However, in order to fully utilise this capacity, there is a need for an ecosystem that supports innovation in Poland. The country is well on the way of implementing the recommendations of the Startup Manifesto. Importantly, this work is supported by the national Startup Poland association and echoed in Poland Startup Manifesto' (Osimo 2016: 65).

## 7. Similarities and Differences Between Startups and other New Businesses

The key difference in the approach to conducting business between a startup and a traditional enterprise is in how they approach failure. 'Rapidly growing tech startups are markedly different from other new businesses. If you start a traditional small business your chances of success in the first two years of conducting a business are relatively high, reaching ca. 75%. Meanwhile if you launch a startup you have an excellent idea for business, team and product, and your plans are promising enough to win you a VC investor, you still have 75% chances of failure' (The Global Startup Ecosystem Ranking 2015) This is also confirmed by the research conducted in 2007 by Chmiel, where the SME market survival rate was quite high and reached 60%, in the first year and in four years dropped to roughly 30% (the share has remained steadily on the same level for a number of years) (Chmiel 2007).

There is also a significant difference in the approach to export. While startups are quite likely to trade abroad (over a half do), in the entire Polish SME sector only 7% businesses export their products / services abroad, with medium businesses (50+ employees) responsible for 50% of all export (Starczewska-Krzysztozek 2012). 'It could be said that, in terms of export activity, startups behave as though they had the potential of a medium enterprise and the same applies to their view of their competitive strength' (Startup Poland 2015: 37).

To analyse the similarities and differences, we assume that startups are defined as enterprises that have been active in Poland for several years, operating a specific business model and in the broad new technologies sector, thus in fact organizations included in the quoted research by Deloitte and Startup Poland. For differentiating purposes, the remaining businesses shall be described as standard new enterprises (SNE). Such businesses were interviewed in the Bank Pekao study (614 businesses surveyed in 2015) (Pekao SA 2015).



**Table 1. Some similarities and differences between startups and standard new businesses (SNE)**

Similarities	Differences
<ul style="list-style-type: none"> <li>• One in three founders is a woman.</li> <li>• Entrepreneurs have higher education.</li> <li>• Businesses with employees mostly fall into microenterprise category (up to 10 headcount).</li> <li>• Both groups have professional experience (have been employed or run a business).</li> <li>• The entrepreneur's own capital is the main source of financing in both types of businesses.</li> </ul>	<ul style="list-style-type: none"> <li>• SNEs are launched by mature people, 62% are over 35.</li> <li>• Over a half of SNEs are one -man businesses.</li> <li>• Startup founders are nearly twice as likely to have had entrepreneurial experience (60%) than SNE founders (36%).</li> <li>• One in five SNE entrepreneurs starting a business used to be unemployed.</li> <li>• Only 2% of SNEs (compared to nearly 36% of startups) have received financing from venture capital and business angels.</li> <li>• 14% of SNEs are recipients of EU grants while a third of startups have received such grants.</li> </ul>

Source: Startup Poland 2015, Deloitte 2016, Pekao SA 2015.

Startups represent a per mille share of microenterprises as well as of new businesses (according to the Main Statistical Office, ca. 350 thousand per year). Due to their growth dynamics, innovativeness, correlation with research and development and potential for foreign expansion, and most importantly, 'due to their focus on the applications of information technologies and the internet, a major branch of modern economy' (Cieślak 2016), startups are considered a key driving force among Polish enterprises. On the other hand though, startups are high-risk ventures, tempted to replicate a successful model rather than risk innovation, as well as facing strong competition from similar businesses from other regions, particularly Silicon Valley.

## 7. Summary and conclusions

This article aimed to present varieties of available approaches to analyses of startups phenomenon in Poland. We acknowledged that the various theories are applicable here, while the Poland is determined by the EU and the global value chains and FDIs. Notwithstanding, the dependency theory and classical economic geography based on industry need to be adjusted towards postmodern modes of production one in the spirit of cognitive capitalism/late capitalism. The cited articles from VoC constellation showed the flexibility of VoC and some inevitable difficulties with results aiming to create paradigm or clear distinction between CMEs and LMEs but not skipping the

hybrid or in-between forms of capitalism. Since, the main trajectory for startups development is scaling up and global position, then we see the applicability of world-system theories as well.

However, the usefulness of tools and methods for analysis modern and industrial capitalism is still applicable here, we see the need to spin-off VoC approaches towards more unique (formal or informal) model of analysis for startups in Poland.

Also the role of governments as regulator and stimulator for startups is interesting to explore since the state-led capitalism seems to be dominating in Poland, even though startupper quite often imitating the Polish entrepreneurial distrust to the external funding for businesses (loans and subsidies).

## References

- Akkermans, D., Castaldi, C., Los, B. (2009), 'Do "liberal market economies" really innovate more radically than "coordinated market economies"? Hall and Soskice reconsidered', *Research Policy* 38: 181–191
- Amin, S. (1987), 'Teoria przejścia do kapitalizmu peryferyjnego', in: Stemplowski, R. (ed.), *Ameryka Łacińska. Dyskusja o rozwoju*, Warszawa: Czytelnik
- Bauman, Z. (2007), *Płynne życie*, Kraków: Wydawnictwo Literackie
- Beck, U. (2002), *Spółczesność ryzyka. W drodze do innej nowoczesności*, Warszawa: Wyd. Nauk. Scholar
- Becker, U. (2009), *Open Varieties of Capitalism. Continuity, Change and Performances*, Palgrave Macmillan UK
- Blank, S. (2013), *Why the Lean Start-Up Changes Everything*, Harvard Business Review
- Bluhm, K. (2010), 'Theories of capitalism put to the test: introduction to a debate on Central and Eastern Europe', *Historical Social Research* 35(2)
- Bohle, D., Greskovits, B. (2012), *Capitalist Diversity on Europe's Periphery*, London Cornell University Press, Ithaca
- Bourdieu, P. (1986), 'The forms of capital', in: Richardson, J. (ed.), *Handbook of Theory and Research for the Sociology of Education*, New York: Greenwood
- Chmiel, J. (2007), *Raport o stanie sektora MSP w Polsce w latach 2005–2006*, Warszawa: PARP
- Cieślak, J. (2016), 'Start-upy: tak, ale przedsiębiorcze', *Rzeczpospolita* 3 July
- Colombo, M.G., Piva, E. (2012), 'Firms' genetic characteristic and competence-enlarging strategies: A comparison between academic and non-academic high-tech start-ups', *Research Policy* 41

- Davila, A., Foster, G., Jia, N. (2010), 'Building Sustainable High Growth Startup Companies: Management Systems as an Accelerator', *California Management Review* 52(3)
- Dychała, M. (2015), 'Startup in secondary education as a stimulus for the labour market', *Management Systems in Production Engineering* 3(19)
- Freeman, R.E. (1984), *Strategic Management: A Stakeholder Approach*, Boston: Pitman
- Gardawski, J. (2013), 'Wstęp. Jaki kapitalizm? Jacy kapitaliści? Wybrane propozycje teoretyczne', in: Gardawski, J. (ed.), *Rzemieślnicy i biznesmeni. Właściciele małych i średnich przedsiębiorstw prywatnych*, Warszawa: Wyd. Nauk. Scholar
- Gemzik-Salwach, A. (2014), 'Wpływ kryzysu światowego na rynek przedsiębiorstw start-up', *Acta Universitatis Lodziensis. Folia Oeconomica* 2
- Gemzik-Salwach, A., Perz, P. (2014), 'Ocena potencjału rozwojowego firm start-up', *Ekonomika i Organizacja Przedsiębiorstwa* 12
- Giddens, A. (2010), *Nowoczesność i tożsamość. 'Ja' i społeczeństwo w epoce późnej nowoczesności*, Warszawa: Wyd. Nauk PWN
- Graham, P. (2012), 'Startup Equals Growth', in: *Graham's Essays on entrepreneurship*, <http://paulgraham.com/growth.html>
- Gunder-Frank, A. (1969), 'The development of underdevelopment', in: Gunder-Frank A., *Latin America: Underdevelopment or Revolution, Essay on the Development of Underdevelopment and the Immediate Enemy*, New York-London: MR
- Hall, P., Soskice, D. (2001), 'An Introduction to Varieties of Capitalism', in: Hall, P., Soskice, D. [eds.], *Varieties of Capitalism. The Institutional Foundations of Comparative Advantage*, Oxford: Oxford Univ. Press
- Hardt, M., Negri, A. (2005), *Imperium*, Warszawa: W.A.B.
- Hardt, M., Negri, A. (2009), *Commonwealth*, Cambridge, Massachusetts: The Belknap Press of Harvard University Press
- Hausner, J. (2011), 'Emerging Capitalism in Poland: Challenges and Dilemmas', *Warsaw Forum of Economic Sociology* 2(2)
- Hausner, J., Zmysłony, M. (2015), *Firma-Idea. Nowe podejście do wartości w biznesie*, Sopot, <http://www.firmaidea.pl/download/publikacja.pdf>
- Klein, N. (2009), *Doktryna szoku. Jak współczesny kapitalizm wykorzystuje klęski żywiołowe and kryzysy społeczne*, Warszawa: Warszawskie Wydawnictwo Literackie MUZA SA
- Klonowski, D. (2009), *Innowacyjność sektora MSP w Polsce. Rządowe programy wsparcia a luka finansowa*, Warszawa: Ernst & Young Sprawne Państwo
- Kotliński, D. (2015), *25 najlepszych polskich startupów*, ebook, Self-Publishing
- Kramer, M.R., Porter, M.E (2006), 'Strategy and Society: The Link Between Competitive Advantage and Corporate Social Responsibility', *Harvard Business Review* 84(12)

- Krugman, P. (1991), 'Increasing returns and economic geography', *Journal of Political Economy* 99(3)
- Krugman, P., Venables, A.J. (1995), 'Globalization and the inequality of nations', *NBER Working Paper Series, Working Paper 5098*, National Bureau of Economic Research, Cambridge
- Krzemiński, B., Jerzemowski, P., Czyżewski, A. (2016), *Gra o innowacje*, Warszawa: PKN Orlen
- Lazzarato, M. (2010), 'Praca niematerialna', in: Sokołowska, J. (ed.), *Robotnicy opuszczają miejsca pracy*, Łódź: Muzeum Sztuki w Łodzi
- Lee, N., Rodriguez-Pose, A. (2013), 'Innovation and spatial inequality in Europe and USA', *Journal of Economic Geography* 13
- Lewandowska, M.S., Szymura-Tyc, M., Gołębiowski, T. (2016), 'Innovation complementarity, cooperation partners and new product export: Evidence from Poland', *Journal of Business Research* (in press)
- Lipski, J., Korba, M., Fedorowicz, Ł. (2015), *Lubelskie startupy*, <http://jaceklipski.pl/wp-content/uploads/2015/12/Ebook-Lubelskie-Startupy-2015-v2.pdf>
- Moulier-Boutang, Y. (2012), *Cognitive Capitalism*, Polity Press
- Nölke, A., Vliegenthart, A. (2009), 'Enlarging the Varieties of Capitalism. The Emergence of Dependent Market Economies in East Central Europe', *World Politics* 61(4)
- Osimo, D. et al. (2016), *The 2016 Startup Nation Scoreboard. How European Union Countries are Improving Policy Frameworks and Developing Powerful Ecosystems for Entrepreneurs*, European Digital Forum, <http://www.europeandigitalforum.eu/index.php/component/attachments/attachments?id=329&task=view>
- Paradkar, A., Knight, J., Hansen, P. (2015), 'Innovation in start-ups: Ideas filling the void or ideas devoid of resources and capabilities', *Technovation* 41/42
- Paunescu, C., Badea, M.R. (2014), 'Examining the social capital content and structure in the pre-start-up planning', *Procedia Economics and Finance* 15
- Piekutko-Matniak, I. (2014), 'Aniołowie biznesu i ich rola w finansowaniu startupów', *Ekonomia i Zarządzanie* 4(6)
- Piketty T. (2015), *Ekonomia nierówności*, Warszawa: Wydawnictwo Krytyki Politycznej
- Presutti, M., Boari, C., Fratocchi, L. (2007), 'Knowledge acquisition and the foreign development of high-tech start-ups: A social capital approach', *International Business Review* 16
- Reinert, E.S. (2013), 'Primitivization of the EU Periphery: The Loss of Relevant Knowledge', *Informationen zur Raumentwicklung* 1
- Deloitte (2016), *Diagnoza ekosystemu startupów w Polsce*, <http://www2.deloitte.com/pl/pl/pages/zarzadzania-procesami-i-strategiczne/articles/innowacje/startup-ankieta2016-2.html>

- Pekao SA (2016), *Raport o sytuacji mikro i małych firm w roku 2015. Firmy rozpoczynające działalność gospodarczą*, Warszawa
- A. Skala., E. Kruczkowska, M. Olczak, (2015), *Polskie Startup, Raport 2015*, Warszawa: Startup Poland
- Rifkin, J. (2009), *Koniec pracy. Schyłek siły roboczej na świecie i początek ery postrynkowej*, Wydawnictwo Dolnośląskie
- Roman, C., Congregado, E., Millan, J.M. (2013), 'Start-up incentives: Entrepreneurship policy or active labour market programme?', *Journal of Business Venturing* 28
- Rost, K. (2011), 'The strength of strong ties in the creation of innovation', *Research Policy* 40
- Sedlacek, T. (2011), *Ekonomia dobra i zła. W poszukiwaniu istoty ekonomii od Gilgamesza do Wall Street*, Warszawa: Studio Emka
- Smus, T.R. (2014), 'Finansowanie start-upów w Polsce', *Zeszyty Naukowe Uczelni Vistula* 35
- Sołoma, A. (2010), 'Uwarunkowania rozwoju funduszy *private equity* w Polsce', *Roczniki Naukowe Stowarzyszenia Ekonomistów Rolnictwa i Agrobiznesu* 12(1)
- Sowiński, R. (2012), *W czym tkwi siła amerykańskich start-upów?*, Warszawa: Polska Agencja Rozwoju Przedsiębiorczości (PARP)
- Sowiński, R., Kośmider, A. (2012), *Od pomysłu do realizacji – jak zbudować start-up*, Warszawa: Polska Agencja Rozwoju Przedsiębiorczości (PARP)
- Standing, G. (2014), *Prekariat. Nowa niebezpieczna klasa*, Warszawa: Wyd. Nauk. PWN
- Starczewska-Krzysztozek, M. (2012), *Konkurencyjność sektora MSP. Raport z badań, PKPP Lewiatan*, Warszawa, [http://issuu.com/pkppl Lewiatan/docs/raportmsp2012\\_pl](http://issuu.com/pkppl Lewiatan/docs/raportmsp2012_pl)
- Startup Guide. An entrepreneur's guide for Harvard University faculty, graduate students, and postdoctoral fellows* (2011), Harvard University Office Of Technology Development, Cambridge [http://otd.harvard.edu/upload/files/OTD\\_Startup\\_Guide.pdf](http://otd.harvard.edu/upload/files/OTD_Startup_Guide.pdf)
- Tapscott, D., Williams, A.D. (2011), *Makrowikinomia. Reset świata i biznesu*, Warszawa: Studio Emka
- Taylor, M.Z. (2004), 'Empirical evidence against Varieties of Capitalism's Theory of Technological Innovation', *International Organization* 58
- The Global Startup Ecosystem Ranking 2015*, Compass, <http://startuppoland.org/knowledge/>
- Thurik, A.R., Stam, E., Audretsch, D.B. (2013), 'The rise of entrepreneurial economy and the future of dynamic capitalism', *Technovation* 33
- Tittenbrum, J. (2012), *Gospodarka w społeczeństwie. Zarys socjologii gospodarki i socjologii ekonomicznej w ujęciu strukturalizmu socjoekonomicznego*, Poznań: Zysk and S-ka
- Wallerstein, I. (2004), *Koniec świata jaki znamy*, Warszawa: Wyd. Nauk. Scholar